Training and Evaluation Outline Report

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20 Jul 2021
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Task Number: 01-CO-8066

Task Title: Perform Downed Aircraft Recovery Missions

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Destruction Notice: None
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Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary	Source Information
	ATP 3-04.13	AIRCRAFT RECOVERY OPERATIONS	Yes	Yes	
	ATP 3-04.7	Army Aviation Maintenance	Yes	No	
	ATP 5-19	RISK MANAGEMENT, with change 1 dated 8 Sep 2014	Yes	No	
	PAM 738-751	FUNCTIONAL USER'S MANUAL FOR THE ARMY MAINTENANCE MANAGEMENT SYSTEM-AVIATION http://www.apd.army.mil/pdffiles/p738_751.pdf	Yes	No	

Conditions: The aviation maintenance unit has received a mission order from higher headquarters directing them to perform downed aircraft (ground or aerial) recovery missions in support of the operational battalion/squadron assigned aircraft (manned and/or unmanned). Trained field maintenance team (FMT) personnel are available to perform day/night downed aircraft (ground or aerial) recovery or aircraft destruction missions authorized by the approval authority in a dynamic and complex operational environment (OE) under all environmental conditions. Prescribed aircraft evacuation recovery kits; test, measurement, and diagnostic equipment (TMDE); and special tools are available and serviceable. A pre-accident plan outlining recovery requirements is available. Communications and digital connectivity is available and information is passed per higher headquarters requirements. Some iterations of this task should be performed in MOPP 4.

Standards: The aviation maintenance units downed aircraft recovery team (DART) personnel performs downed aircraft (ground or aerial) recovery or aircraft destruction missions authorized by the approval authority according to applicable publications and regulations (the primary being ATP 3-04.13), the units standard operating procedures (SOP), pre-accident plan and the commanders guidance. The DART assessor determines that a quick-fix repair is possible allowing self-recovery by a one-time evacuation mission. When a one-time evacuation mission is not possible, aircraft is recovered (ground or aerial) or evacuated within the times specified in the mission order using serviceable aircraft recovery kits and special tools to a unit maintenance collection point (UMCP), or nearest maintenance facility. Abandoned aircraft is sanitized or cannibalized and destroyed in place to prevent exploitation by enemy forces. Aircraft recovery or approved aircraft destruction missions are completed according to regulatory policies, the aircraft recovery and DART SOP. The unit reports accurate and timely information to the higher headquarters.

Note: Use the unit's authorized table of organization and equipment (MTOE) positions to determine key leaders required to conduct this task. Record the percentage of Leaders Present at Training/Required on the Objective Task Evaluation Criteria Matrix during task assessment. Examples of MTOE authorized key leaders include: Commander, Executive Officer, Staff Section/Element/Team Officers, Platoon Leaders, Command Sergeants Major, First Sergeants, Platoon Sergeants, Section Sergeants, and Team Leaders.

Live Fire: No

Objective Task Evaluation Criteria Matrix:

Plan and Prepare			Execute						Assess	
Operational Environment		Training Environment (L/V/C)	Leaders Present at Training/Required	Present at Training/Required	External Eval	Performance Measures	Critical Performance Measures	Leader Performance Measures	Evaluator's Observed Task Proficiency Rating	Commander's Assessment
CO & BN										
Dynamic and Complex (4+ OE Variables and Hybrid Threat)	Night	Commanders will determine if task training will be conducted under live, virtual, or constructive conditions using corresponding event types (e.g., class, situational training exercise [STX], field training exercise [FTX]) in order to facilitate the crawl-walk-run methodology of training progression. External evaluations (EXEVAL) must be conducted in a live environment.	>=75%	>=80%	Yes	>=80%	All	>=85%	**T**	**T**
									T-	**T-**
Dynamic (Single Threat)	Day		60-74%	60-79%	No	65-79%	<All	75-84%	**P**	**P**
									P-	**P-**
Static (Single Threat)			<=59%	<=59%		<=64%		<=74%	**U**	**U**

Remarks: Prior to EXEVAL, coordination should be made between the evaluator and the evaluated unit's higher headquarters to discuss details of the task's Objective Task Evaluation Criteria Matrix and the assessment criteria for each performance step/measure, (e.g. Operational Environment, leaders present, personnel present, etc.) See FM 7-0, Training, for more information. This task was updated on 20 July 2021.

All tasks are periodically revised; however, it is not uncommon for some prerequisite, supporting collective, and/or supporting individual tasks to become Superseded or Obsolete between revisions. At the time of collective task publication, all associated tasks are in an Approved Status. If a task is now in a Superseded Status, the current version may be found via the Army Training Network (ATN), Digital Training Management System (DTMS), or the Central Army Registry (CAR) using the same task number/title; tasks in an Obsolete Status should be disregarded.

YOUR FEEDBACK IS IMPORTANT. For questions, reporting errors, or making recommendations for improvement, please contact usarmy.rucker.avncoe.mbx.dotd-collective@mail.mil. When reporting errors/making recommendations for improvement, please provide supporting doctrinal and/or regulatory references.

Notes: The Objective Task Evaluation Criteria Matrix will be used to determine task proficiency.

Scenarios: Creative use of scenario-based training allows commanders to challenge their leaders to improvise with the resources at hand, and accomplish assigned missions under complicated conditions. Once task proficiency is achieved under base conditions, leaders can alter scenarios to replicate projected operational environments and enhance unit skills by offering conditions that require leaders to adapt to degraded capabilities (e.g.,

position/navigation/timing denial, or degraded/denied communications).

Operational Environment (OE): Army Aviation must train to fight in OEs that encompass a wide range of enemy types and combinations employing traditional, unconventional, and hybrid tactics. This includes training to counter threats such as small arms, man-portable air defense systems (MANPADS), surface-to-air missiles (SAM), anti-helicopter mines, improvised explosive devices (IED), and enemy air defense systems that may be employed independently or as part of an integrated air defense system (IADS). See ATP 3-04.1, Aviation Tactical Employment, for additional threat information.

Use the following definitions for assessing the OE:

1. Static: Aspects of operational variables (political, military, economic, social, information, infrastructure, physical environment, and time [PMESII-PT]) needed to stimulate mission variables (mission, enemy, terrain and weather, troops, and support available, time available, and civil considerations [METT-TC]) are fixed throughout the unit's execution of the task.

2. Dynamic: Operational variables and threat tactics, techniques and procedures (TTP) for assigned counter-tasks change in response to the execution of a blue forces (BLUFOR) task.

3. Complex: Requires a minimum of four or more operational variables (PMESII-PT); brigade and higher units require all eight operational variables to be replicated in varying degrees based on the task being trained.

4. Single Threat: Regular, irregular, criminal, or terrorist.

5. Hybrid Threat: The diverse and dynamic combination of regular forces, irregular forces, terrorist forces, and/or criminal elements unified to achieve mutually benefitting effects.

Note: An after-action review (AAR) should be conducted at appropriate times during and at the conclusion of a training event or operation with the objective of improving future performance. See FM 7-0, Training, for additional information.

Note: The term aircraft as used in the performance steps includes manned and unmanned aircraft.

Safety Risk: Medium

Task Statements

Cue: Upon receipt of mission order.

DANGER

Leaders have an inherent responsibility to conduct Risk Management to ensure the safety of all Soldiers and promote mission accomplishment.

WARNING

Risk Management is the Army's primary decision-making process to identify hazards, reduce risk, and prevent both accidental and tactical loss. All Soldiers have the responsibility to learn and understand the risks associated with this task.

CAUTION

Identifying hazards and controlling risks across the range of military operations of Army functions, operations, and activities is the responsibility of all Soldiers.

Performance Steps and Measures

NOTE: Assess task proficiency using the task evaluation criteria matrix.

NOTE: Asterisks (*) indicate leader steps; plus signs (+) indicate critical steps.

STEP/MEASURE	GO	NO-GO	N/A
Plan			
+* 1. The commander receives the mission order for mission analysis and conducts troop leading procedures (TLP) managing time towards successful execution.			
* 2. The commander gains and/or maintains situational understanding based on the initial assessment and maintenance condition of the aircraft forced down due to component malfunction, accident, or combat-related damage.			
Note: Maintenance evacuation is the physical act of moving an unserviceable aircraft from one maintenance location to another while aircraft recovery missions include the assessment, repair and retrieval, if possible, of downed aircraft that is not capable of continued safe flight.			
+* 3. The commander or designated representative and maintenance leaders conduct mission planning/preparation in order to execute the following types of aircraft recovery missions according to the unit's maintenance standard operating procedures (SOP) and current doctrine.			
Note: The aviation maintenance unit conducts dedicated aircraft recovery as a contingency operation, however, when properly resourced can perform internal aerial or ground recoveries. Aerial or ground recoveries is typically conducted by the aviation support company.			
a. Self-Recovery.			
b. Immediate recovery.			
c. Delayed recovery.			
(1) Deliberate recovery.			
(2) Hasty recovery.			
d. Dedicated recovery.			
(1) Ground dedicated recovery.			
(2) Aerial dedicated recovery.			
+* 4. The aviation maintenance officer (AMO) participates in the aircraft recovery and risk management (RM) process throughout the aircraft recovery planning phase.			
+* 5. The maintenance unit's appointed aviation safety officer (ASO) participates in the risk management (RM) process throughout the downed aircraft recovery mission planning phase.			
+* 6. The battalion/squadron aviation safety officer (ASO) monitors the aircraft recovery mission planning phase.			
+* 7. The commander uses the risk management (RM) process to mitigate or eliminate hazards associated with the personnel, equipment and activities that might affect the safe recovery of downed aircraft.			
Prepare			
+* 8. The commander or designated representative briefs the field maintenance downed aircraft recovery team (DART) leader and members to include selected security personnel at a predetermined location according to the unit maintenance SOP.			
* 9. The commander directs the DART officer-in-charge (OIC) to conduct preparations to perform a downed aircraft (ground or aerial) recovery mission.			
+* 10. The DART's OIC/noncommissioned officer-in-charge (NCOIC) coordinates aircraft (ground or aerial) recovery, evacuation, or destruction.			
Note: Battle damage assessment and repair (BDAR) procedures may be performed as part of Downed Aircraft Recovery Missions. Unmanned aircraft recovery missions are coordinated with the parent unmanned aircraft system (UAS) unit.			
a. Coordinates with assessor visually observing downed aircraft to verify location, type of aircraft, and type of damage incurred (component malfunction, accident, or combat-related damage) as well as type of weapons, ammo, or hazardous materials carried aboard aircraft.			
b. Conducts a preliminary maintenance assessment of downed aircraft based on data provided by aircrews or assessor to establish maintenance requirements and coordinates aircraft recovery (ground or aerial) methods.			
c. Briefs DART personnel on the maintenance preliminary assessment and recovery type (self, immediate, delayed or dedicated) and aircraft recovery method to use based on the existing tactical situation, to include aircraft destruction, if required.			
d. Coordinates dedicated aircraft (ground or aerial) recovery missions in detail to minimize or eliminate risk, to include possible external destruction by joint assets if recovery operations are not feasible.			
e. Obtains tactical intelligence information from the battalion/squadron staff S-2 to coordinate and facilitate the safe insertion of DART and security personnel and equipment to conduct aircraft recovery missions.			
f. Conducts operational requirements and battlefield coordination through the battalion/squadron staff S-3 to eliminate the possibility of fratricide.			
g. Determines requirements for fire support, engineer support, ground security, intelligence, aerial and/or ground surveillance support in preparation of conducting DART missions, as required.			
h. Enforces safety procedures according to the tactical SOP, unit maintenance SOP, and applicable safety publications and regulations.			
i. Enforces environmental considerations and protection program guidelines and procedures according to the tactical SOP and the unit maintenance SOP.			

j. Identifies if additional maintenance, security, or expertise support is required to facilitate recovery or evacuation of aircraft.

k. Conducts preparations to recover aircraft through self-recovery or dedicated recovery.

l. Requests destruction/disposal authorization from the appropriate authority for non-reparable and/or non- recoverable aircraft, if required.

m. Conducts preparations to perform selective cannibalization and destruction or abandonment of downed aircraft, if required.

n. Provides aircraft recovery updates to the battalion/brigade commander, staff and/or production control (PC) OIC/NCOIC on aircraft recoveries to include recovery timelines until the aircraft is safely evacuated or recovered to the nearest UMCP or maintenance facility, abandoned or destroyed as required.

+* 11. The DART OIC organizes aircraft recovery operations based on METT-TC conditions gained from disseminated intelligence reports.

a. Organizes the composition of the DART based on METT-TC and input received from the aircrew/unmanned aircraft crewmembers or the aviation element maintenance officer in charge (OIC).

b. Ensures training and rehearsals for DART members on dedicated aircraft recovery methods and aircraft destruction steps are conducted.

c. Conducts dedicated aircraft recovery training using the Unit-Maintenance Aerial Recovery Kit (U-MARK), if assigned, and pre-accident plan provisions.

d. Identifies additional training requirements for DART personnel to include using aircraft special tools and related aircraft recovery equipment, as required.

e. Briefs DART personnel on the type of aircraft recovery method to be used.

f. Briefs DART members on safety and environmental considerations, enemy/friendly situation, terrain, weapons, communications, ground/perimeter security, communications, call signs, and hazardous materials.

+* 12. The DART OIC directs aircraft recovery missions based on METT-TC conditions gained from disseminated intelligence reports.

a. Prepares disabled aircraft for a one-time evacuation mission, if possible.

b. If a one-time evacuation mission is not possible, directs DART personnel to perform dedicated aircraft recovery missions.

c. Enforces safety procedures according to the tactical SOP, unit maintenance SOP, and applicable safety publications and regulations.

d. Enforces environmental considerations and protection program guidelines and procedures according to the unit maintenance SOP.

e. Establishes ground/perimeter security and communications at the aircraft recovery site.

f. Directs aircraft rigging for dedicated recovery missions.

g. Directs DART procedures while securing disabled aircraft to recovery vehicle for ground or aerial recovery.

h. Supervises safe evacuation of disabled aircraft to nearest UMCP or maintenance facility.

i. Receives destruction/disposal authorization from the appropriate authority for non-reparable/non-recoverable aircraft.

j. Once destruction of aircraft is authorized and disposal instructions are received, supervises destruction of aircraft according to instructions received and Technical Manual (TM) 750-244-1-5, as required.

k. Provides aircraft recovery updates to the chain-of-command until the disabled aircraft is safely evacuated to the nearest UMCP or maintenance facility or, if authorized, destroyed.

+* 13. The commander or designated representative coordinates with the aviation support battalion (ASB) when internal DART capabilities are exceeded to effect recovery of the downed aircraft, if required.

Execute

+ 14. DART personnel perform dedicated aircraft (ground or aerial) recovery missions based on METT-TC conditions.

a. Locate downed aircraft to be recovered based on reports/reconnaissance.

b. Identify immediate dangers in the vicinity of the downed aircraft.

c. Perform ground/perimeter security functions, as directed.

d. Safeguard, secure, and remove sensitive or classified equipment, unit property, and associated documents as directed.

e. Install and inspect aircraft recovery rigging equipment prior to removal of damaged aircraft, if applicable.

f. Secure downed aircraft to recovery vehicle for ground recovery.

g. Complete safe evacuation of downed aircraft to the nearest UMCP or maintenance facility.

h. Comply with safety procedures according to the tactical SOP, unit maintenance SOP, and applicable safety publications and regulations.

+ 15. The DART personnel cannibalize usable components as directed and destroy non-reparable or non-recoverable aircraft, equipment, and associated documents, as required.

a. Cannibalize serviceable aircraft components based on METT-TC and per the commander or designated representative's instructions.

b. Destroy non-reparable or non-recoverable aircraft, equipment, unit property, and associated documents on order from the appropriate authority according to TM 750-244-1-5.

c. Employ safety procedures during aircraft destruction missions as briefed by the DART OIC and according to the tactical SOP, unit maintenance SOP, applicable safety regulations and publications.

+* 16. The AMO monitors and provides maintenance and logistics related information to the commander and staff as it pertains to the DART operation, as required.

+ 17. DART personnel completes downed aircraft recovery mission, when:

a. The unit performs self-recovery.

b. Aircraft is recovered using ground or aerial recovery methods and techniques.

c. Aircraft is selectively cannibalized, abandoned or destroyed as required.

Assess

18. The unit conducts an After Action Review (AAR).

Task Performance Summary Block

Training Unit			ITERATION							
_____			1		2		3		4	
Date of Training per Iteration:										
Day or Night Training:			Day / Night		Day / Night		Day / Night		Day / Night	
			#	%	#	%	#	%	#	%
Total Leaders Authorized		% Leaders Present								
Total Soldiers Authorized		% Soldiers Present								
Total Number of Performance Measures		% Performance Measures 'GO'								
Total Number of Critical Performance Measures		% Critical Performance Measures 'GO'								
Live Fire, Total Number of Critical Performance Measures		% Critical Performance Measures 'GO'								
Total Number of Leader Performance Measures		% Leader Performance Measures 'GO'								
MOPP LEVEL										
Evaluated Rating per Iteration T, T-, P, P-, U										

Mission(s) supported: None

MOPP 4: Sometimes

MOPP 4 Statement: Commanders at all levels are responsible for integrating effective CBRN defense measures into their training and operations considerations.

Commanders must recognize the significant increase in time required for mission execution in MOPP 4 and anticipate the effects of that degradation on subsequent missions. Leaders must also understand the increased drinking water requirements.

The use of MOPP involves risk; the better commanders are at analyzing their units' needs for protection, the lower their units' risks. MOPP analysis enables leaders to select the appropriate MOPP level.

During MOPP analysis, the commander considers factors such as mission, work rate and its duration, probable warning time, terrain, weather, time of day, unit training, additional protection available, and alarm placement.

NVG: Never

NVG Statement: N/A

Prerequisite Collective Task(s):

Step Number	Task Number	Title	Proponent	Status
	01-CO-5198	Conduct Aviation Mission Planning/Preparation	01 - Aviation/Aviation Logistics (Collective)	Approved

Supporting Collective Task(s):

Step Number	Task Number	Title	Proponent	Status
1.	71-CO-5100	Conduct Troop Leading Procedures	71 - Mission Command (Collective)	Approved
4.	71-CO-5145	Conduct Risk Management	71 - Mission Command (Collective)	Approved
4.	34-PLT-0005	Perform Risk Management	34 - Combat Electronic Warfare and Intelligence (Collective)	Approved
12.	63-CO-4017	Maintain Communications	63 - Multifunctional Logistics (Collective)	Approved
14.	55-CO-4003	Conduct Tactical Convoy	55 - Transportation (Collective)	Approved
14.	01-CO-8065	Perform Aircraft Battle Damage Assessment and Repair (BDAR)	01 - Aviation/Aviation Logistics (Collective)	Approved
14.	55-CO-4006	Defend Convoy Elements	55 - Transportation (Collective)	Approved

OPFOR Task(s): None

Supporting Individual Task(s):

Step Number	Task Number	Title	Proponent	Status
7.	011-15B-0003	Integrate Risk Management into Aviation Operations	011 - Aviation (Individual)	Approved
10.	552-101-3895	Coordinate Aircraft Recovery	552 - Aviation Logistics (Individual)	Approved
10.	552-000-3003	Conduct Downed Aircraft Recovery Team (DART) Operations	552 - Aviation Logistics (Individual)	Approved
10.	011-15B-0038	Organize Aviation Maintenance Operations	011 - Aviation (Individual)	Approved
11.	011-150U-1175	Coordinate Downed Aircraft Recovery Operations	011 - Aviation (Individual)	Approved
12.	011-AMO-0025	Manage Aircraft Recovery Operations	011 - Aviation (Individual)	Approved
12.	011-ACC2-6000	Conduct Troop Leading Procedures	011 - Aviation (Individual)	Approved
14.	552-000-3003	Conduct Downed Aircraft Recovery Team (DART) Operations	552 - Aviation Logistics (Individual)	Approved

Supporting Drill(s): None

Supported AUTL/UJTL Task(s):

Task ID	Title
ART 4.1.1	Provide Field Maintenance Support
ART 4.1.1.3	Conduct Recovery Operations

TADSS

TADSS ID	Title	Product Type	Quantity
01-146	Aviation Combined Arms Tactical Trainer (AVCATT)	SIM	1
FTX MILES (GROUND)	FTX GROUND MILES (ALL UNIT VEHICLE, AREA WEAPONS and INDIVIDUAL and CREW SERVED WEAPONS TRANSMITTERS LASERS AND LASER DETECTORS) (Local TADSS	DVC	1
23-20	M2K Multiple Integrated Laser Engagement System 2000 (MILES 2000) M16A1/M16A2 Rifle Kit	DVC	1
T 03-001	Chemical Grenade Kit	DVC	1
03-16	Chemical Agent Monitor Simulator, STS 701	DVC	1

Equipment (LIN)

LIN	Nomenclature	Qty
No equipment specified		

Materiel Items (NSN)

NSN	LIN	Title	Qty
No materiel items specified			

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card.

2. FM 3-34.5 has been replaced by ATP 3-34.5. All aerial defensive and offensive tactical operations require an area in which to maneuver. Most training areas have environmental restrictions that a unit must follow during tactical operations. The flight-route parameters resulting from environmental and noise complaint restrictions are unique to aviation. These restrictions must be considered when planning training aviation missions and during mission briefs.

3. Aviation units use large amounts of hazardous materials during routine maintenance. Commanders will be held responsible for the proper disposal of hazardous materials (HAZMAT). The operation of
forward arming and refueling points (FARPs) is especially challenging because of the potential for major environmental catastrophes. The SOPs specify the proper disposal of HAZMAT (such as oils and lubricants, used drip pans, and grease and oil washed off vehicles).

4. All gunnery ranges have environmental SOPs which aviation units need to comply with. These restrictions include normal environmental guidance. They also include specific instructions for the disposal of casings and ammunition boxes and maneuvering weapon systems.

Note. Each U.S. installation is subject to local and state environmental regulations as well as to federal legislation. For information pertaining to a specific location, contact the installation environmental office. When overseas or on deployment, contact operations and plans, and training staff officer (S3) or the assistant chief of staff, operations (G3).

Safety: In a training environment, leaders must perform a risk assessment in accordance with current Risk Management Doctrine. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW current CBRN doctrine.

2. Risk Management (RM) identifies operational risks so hazards can be reduced or eliminated. RM allows units to operate in high-risk environments. Leaders at every level are responsible for identifying hazards, taking measures to reduce or eliminate hazards, and accepting risk only to the point that the benefits outweigh the potential losses. The Army's doctrinal manuals articulate the risk-management process as the principal risk-reduction tool. RM is not an add-on feature to the decision-making process but, rather, a fully integrated element of planning and executing operations. The goal is to make RM a routine part of planning and executing operational and training missions.

3. RM is a continuous process for each assigned mission or training event. It must be integral to military decisions tied into each training plan and become a continuous part of preparation for training. Safety demands total chain of command involvement in planning, preparing, executing, and evaluating training.

Note: Aviation operations are complex and incorporate many unique tactical and technical components to the operating/training environment. DD Form 2977 is the Army's standard form for deliberate risk assessment, however, Aviation units may require additional specialized documentation. The initial safety risk assessment of this task does not take into account unit-specific details [and mission and operational variables OR variables within the OE] that may increase risk as determined by unit leaders responsible for performing this task.